

Title (en)

Fluid material filling apparatus and related filling method

Title (de)

Vorrichtung und Verfahren zum Beifüllen mit fließfähigem Material

Title (fr)

Dispositif et procédé pour le remplissage avec une substance fluide

Publication

EP 1303172 A3 20040407 (EN)

Application

EP 02021126 A 20020923

Priority

- JP 2001313120 A 20011010
- JP 2002174069 A 20020614

Abstract (en)

[origin: EP1303172A2] A vacuum pump 16 depressurizes a scavenging chamber 5 to discharge the air or gas residing in a via hole 21. Then, a paste chamber 9 provided adjacent to the scavenging chamber 5 moves on the scavenged via hole 21. A squeezing unit 6 provided in the paste chamber 9 pushes a conductive paste 13 into the via hole 21. Keeping the inside space of the via hole 21 in a depressurized condition is effective to let the conductive paste 13 enter deeply into the via hole 21. The inside space of the via hole 21 is entirely filled with the conductive paste 13.
<IMAGE>

IPC 1-7

H05K 3/40

IPC 8 full level

B41F 15/08 (2006.01); **H05K 3/40** (2006.01)

CPC (source: EP KR US)

H05K 3/40 (2013.01 - KR); **H05K 3/4053** (2013.01 - EP US); **H05K 2203/0126** (2013.01 - EP US); **H05K 2203/085** (2013.01 - EP US)

Citation (search report)

- [XY] FR 2803227 A1 20010706 - NOVATEC SA SOC [FR]
- [A] US 6231333 B1 20010515 - GRUBER PETER ALFRED [US], et al
- [Y] PATENT ABSTRACTS OF JAPAN vol. 018, no. 611 (M - 1708) 21 November 1994 (1994-11-21)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 08 30 August 1996 (1996-08-30)

Cited by

FR2858255A1; DE102004025714B4; FR2858254A1; WO2005011877A3

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DOCDB simple family (application)

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